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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,472	03/08/2004	William L. Hickok	P114357	2309

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EXAMINER

VASUDEVA, AJAY

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/796,472

Applicant(s)

HICKOK ET AL.

Examiner

Ajay Vasudeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 11-19, 21-23 and 26-61 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 6-10, 20, 24 and 25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The crossed out reference # US 5,283,472 listed in the IDS has not been considered because the reference number does not match with the inventor's name, possibly due to a typographical error.

Drawings

2. Applicant is requested to submit formal drawings because figures **1 through 5a** are informal, and figures **7 through 14** lack sufficient clarity.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following must be shown or the feature(s) canceled from the claim(s).

- A multi-chambered hull with multi-creased wall sections, a plurality of baffles welded to form a watertight seal, and the wall sections and the baffles providing a plurality of air tight flotation chambers, as set forth in claims 12, 37 and 54.
- A second engine connected to a second propeller, as set forth in claims 16 and 41.

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "**Replacement Sheet**" or "**New Sheet**" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. A correction and/or clarification of the following is required:
- On page 5 (lines 5 and 10), applicant has set forth a roll of 720 degrees, which appears to be excessive. A correction and/or clarification is required if the recitation "720 degrees" is a typographical error.
 - On page 12 (line 8), change "end" to – and --.
 - On page 14 (line 12), change "role" to – roll --.

Applicant is requested to review the entire application for similar typographical error.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

- A multi-chambered hull with multi-creased wall sections, a plurality of baffles welded to form a watertight seal, and the wall sections and the baffles providing a plurality of air tight flotation chambers, as set forth in claims 12, 37, 51 and 54.
- A second engine connected to a second propeller, as set forth in claims 16 and 41.
- A method of building a boat with fins, including the steps of (a) attaching fins to the boat, and (b) adjusting the dimensions of the fins, as set forth in claim 58.

Note: Applicant is cautioned against entering new matter.

Claim Objections

6. Claim 1, 11, and 15 are objected to because of the following informalities:
- In claims 1, 4, 5, 15, 26, 42 etc., change "role" to – roll --.
 - In claim 6, change "were" to – whereby --.

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- In claim 11 (line 2) and claim 36, change “**plaining**” to – **planing** --.
- In claim 14, 16 and 41, change “**prop**” to – **propeller** --.

Applicant is requested to review all claims for similar typographical error.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the **first paragraph** of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 12, 16, 18, 37, 41 and 51-61 are rejected under 35 U.S.C. 112, **first paragraph**, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 12, 37 and 54 recite a multi-chambered hull with multi-creased wall sections made of metal sheet, a plurality of baffles welded to form a watertight seal, and the wall sections and the baffles providing a plurality of air tight flotation chambers. Claim 51 sets forth a method of building the boat structure recited in claims 12, 37 and 54.

However, the Specification is silent on the description of such claimed structure, and therefore, one skilled in the art would not be able to make and/or use the claimed invention.

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In claims 16 and 41, applicant sets forth a second engine connected to a second prop[eller]. The claims further set forth the second propeller as being exposed to a lower concentration of air than without the fin stabilization system during a turn greater than 35 mph.

The Specification or the drawing do not disclose a second set of engine and propeller, and fail to describe as to why the second propeller would be exposed to a lower concentration of air.

Similarly, Claim 58 recites a method of building a boat with fins, including the steps of (a) attaching fins to the boat, and then (b) adjusting the dimensions of the fins. The language used in the claim suggests that the fins dimensions are adjusted after such fins have been attached to the boat. However, the Specification discloses no such steps, and therefore, one skilled in the art would not be able to make and/or use the claimed invention.

9. The following is a quotation of the **second paragraph** of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 26-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 26 (lines 13-14), the limitation "**having the distance between the forward effective portion positioned in the area of influence**" is vague and confusing, and therefore renders the claims indefinite. It is noted that a distance is measured between any two points of reference. However, the claim sets forth only one

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reference point with "forward effective portion", without identifying the other intended reference point, and therefore fails to define the metes and bounds of the claim.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1, 4, 5, 11, 13-15, 17, 19, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wynne (US 6,807,920 B1).

Wynne shows a fin stabilization system having first and second fins positioned in an area of influence of a boat. Each fin has a length extending between front and rear edges, and is positioned such that the rear edge of the fin is positioned ahead of a rearward portion of the boat. The depth component of the fin is in the range of 2 inches and 6 inches (see col. 4, line 29).

The distance of fin rear edge from the rearward portion of the boat appears to be in the range of 5 inches to 12 inches, and the length of each fin appears to be no more than 70 inches. Wynne, nevertheless, does not expressly disclose the dimensions of such distance or the length.

However, it would have been a matter of obvious design choice for one skilled in the art at the time of the invention to position the fins in the range of 5 inches to 12 inches from the rearward portion of the boat for obtaining optimum performance during a sharp turn.

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It is noted that personal watercrafts (PWCs), such as shown by Wynne, usually have a length in the range of 60-120 inches. It would have been a matter of obvious design choice for one skilled in the art at the time of the invention to limit the length of each fin to be less than one half length of the hull – i.e., fins being limited to 30-60 inches -- so that such fins would not interfere with the execution of a sharp turn of the boat.

Regarding the roll experienced by the boat, applicant may note that such is a function of turn radius. If the boat executes a gentle turn having an extremely large radius, it would experience only a negligible degree of roll even at speeds exceeding 50 mph or at full throttle.

Regarding claims 21-23, the boat of Wynne is considered as capable of creating a G-force in excess of 2.0 if the boat executes a sharp turn at high speeds.

Allowable Subject Matter

13. Claims 2, 3, 6-10, 20, 24 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The allowability of claims 26-50 cannot be determined due to the indefiniteness of such claims.

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Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

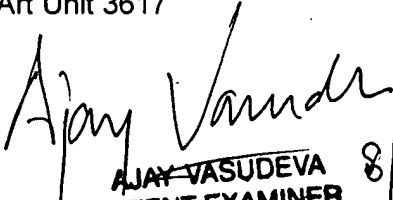
- The prior art cited in the attached PTO Form 892 shows boats with fin stabilizing systems.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 -- 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajay Vasudeva
Examiner
Art Unit 3617


AJAY VASUDEVA
PATENT EXAMINER 8/15/05